CLAIMS LISTING

1. (currently amended) A method for reducing biological oxygen demand (BOD) in an aqueous waste stream from a source selected from the group consisting of food processing, municipal waste treatment, fermentation and chemical plants, wherein said waste stream contains from about 0.02% to about 3.0% magnesium chloride (weight percent) or an equivalent molar amount of divalent magnesium cation, said method comprising the step of aerating the waste stream for a time of about one to about seven days, wherein said method is capable of achieving a reduction in BOD in a starting material having about 750 ppm BOD to under 400 ppm in 24 hours.

2 Cancelled

- (previously amended) The method of claim 1, wherein flocculated material is removed prior to the step of aeration.
- (previously amended) The method of claim 1, wherein the waste stream contains from about 0.02% to about 0.5% MgCl₂ (weight/volume) or an equivalent amount of divalent magnesium cation.
- (previously amended) The method of claim 1, wherein the step of aerating maintains a dissolved oxygen level from about 1 to about 8 ppm oxygen.
- (previously amended) The method of claim 1, wherein the waste stream is from an animal meat processing facility, from a plant food processing facility, from a fermentation facility or from an organic chemical facility.
- 7. (original) The method of claim 6, wherein the waste stream is from an animal meat processing facility and wherein a magnesium chloride-dissolved air flotation process has been employed to remove flocculated material, prior to the step of aerating, from the waste stream.

- (previously amended) The method of claim 1, wherein the step of aerating results in foam formation and wherein the method further comprises the step of foam removal from the waste water.
- (previously amended) The method of claim 1, wherein the step of aerating is carried out using a Venturi system.
- (currently amended) The method of claim 1, wherein[[,]] sodium hypochlorite or hydrogen peroxide are not added to said waste stream.
- 11. (new) The method of claim 1 wherein said method is capable of achieving a reduction in BOD in a starting material having about 750 ppm BOD to about 100 ppm in six days.